

# Ghi chú về docker compose

## Kiểm tra phiên bản compose v2

- docker compose

```
# V1
docker-compose version

# V2
docker compose version

# disable v2
# docker-compose disable-v2
```

## Tìm hiểu docker-compose.yaml file

- <https://github.com/compose-spec/compose-spec/blob/master/spec.md>
  - compose.yaml, docker-compose.yaml

```
services:
  web:
    build: .
    # CMD
    command: bundle exec thin -p 3000
    # ENTRYPOINT
    entrypoint: /code/entrypoint.sh
    # USER
    user:
    # namespace
    userns_mode: "host"
    # [HOST:]CONTAINER[/PROTOCOL]
    # HOST - [IP:](port | range)
```

```
# CONTAINER - port | range
# PROTOCOL - tcp|udp
ports:
  - '5000:5000'
  - target: 80
    host_ip: 127.0.0.1
    published: 8000-9000
    protocol: tcp
    mode: host
expose:
  - "3000"
  - "8000"
env_file: .env
environment:
  RACK_ENV: development
  SHOW: "true"
  USER_INPUT:
environment:
  - RACK_ENV=development
  - SHOW=true
  - USER_INPUT
depends_on:
  - redis
depends_on:
  redis:
    # service_healthy
    condition: service_started
container_name: my_web
credential_spec:
  # Windows HKLM\SOFTWARE\Microsoft\Windows
NT\CurrentVersion\Virtualization\Containers\CredentialSpecs
  file: my-credential-spec.json
  registry: my-credential-spec
# SERVICE:ALIAS
links:
  # /etc/hosts
  # container -> alias
external_links:
  - redis
  - database:mysql
```

```
# /etc/hosts
extra_hosts:
- "somehost:162.242.195.82"
- "otherhost:50.31.209.229"
# ACL
group_add:
- mail
# https://docs.docker.com/engine/reference/builder/#healthcheck
healthcheck:
  test: ["CMD", "curl", "-f", "http://localhost"]
  interval: 1m30s
  timeout: 10s
  retries: 3
  start_period: 40s
# always|never|missing|build
pull_policy:
# no|always|no-failure|unless-stopped
restart:
read_only:
tmpfs:
- /run
- /tmp
runtime: runc
configs:
- web_config
- source: my_config
  target: /redis_config
  uid: "103"
  gid: "103"
  mode: 0440
profiles:
# secrets
# /run/secrets/<secret_name>
secrets:
- server-certificate
# VOLUME:CONTAINER_PATH:ACCESS_MODE
volumes:
- type: volume
  source: db-data
  target: /data
```

```
    volume:
      nocopy: true
- type: bind
    source: /var/run/postgres/postgres.sock
    target: /var/run/postgres/postgres.sock
volumes_from:
working_dir:
redis:
  image: 'redis:alpine'
  domainname:
  hostname:
  labels:
  stdin_open:
  tty:
  ulimits:
    nproc: 65535
    nofile:
      soft: 20000
      hard: 40000
  stop_grace_period: 10s
  stop_signal: SIGTERM
  storage_opt:
    size: '1G'
# tinit
init: false
# shareable
# service:{name}
ipc:
isolation:
logging:
  driver: syslog
  options:
    syslog-address: "tcp://192.168.0.42:123"
# host[none|service:[service name]]
network_mode:
networks:
  some-network:
    ipv4_address:
    ipv6_address:
  aliases:
```

```
- alias1
app_net:
  link_local_ips:
    - 57.123.22.11
  priority: 100
  mac_address:
dns:
- 8.8.8.8
- 9.9.9.9
# /etc/resolv.conf
dns_opt:
- use-vc
- no-tld-query
dns_search:
- dc1.example.com
- dc2.example.com
cap_add:
- ALL
cap_drop:
- NET_ADMIN
- SYS_ADMIN
sysctls:
  net.core.somaxconn: 1024
  net.ipv4.tcp_syncookies: 0
privileged:
security_opt:
- label:user:USER
# CPU
cpu_count:
cpu_percent:
cpu_shares:
cpu_period:
cpu_quota:
cpu_rt_runtime:
cpu_rt_period:
cpuset:
mem_swappiness:
memswap_limit:
oom_kill_disable:
oom_score_adj:
```

```
# /dev/shm
shm_size:
#
pid:
# os[/arch[/variant]]
platform:
# cgourp
cgroup_parent:
# https://www.kernel.org/doc/html/latest/admin-guide/cgroup-v1/devices.html
device_cgroup_rules:
  - 'c 1:3 mr'
  - 'a 7:* rmw'
# HOST_PATH:CONTAINER_PATH[:CGROUP_PERMISSIONS]
devices:
  - "/dev/ttyUSB0:/dev/ttyUSB0"
  - "/dev/sda:/dev/xvda:rwm"
# Block device
blkio_config:
  weight: 300
  weight_device:
    - path: /dev/sda
      weight: 400
  device_read_bps:
    - path: /dev/sdb
      rate: '12mb'
  device_read_iops:
    - path: /dev/sdb
      rate: 120
  device_write_bps:
    - path: /dev/sdb
      rate: '1024k'
  device_write_iops:
    - path: /dev/sdb
      rate: 30
configs:
  web_config:
    file: ./default.nginx
  redis_config:
    external: true
networks:
```

```
front-tier:
  ipam:
    driver: default
  config:
    - subnet: "172.16.238.0/24"
    - subnet: "2001:3984:3989::/64"
  app_net:
    driver: bridge
volumes:
  db-data:
```

■ ■

```
web:
  extends:
    # compose.yaml
  file: common.yml
  # base service
  service: webapp
```

# Mời cà phê

Nếu cảm thấy blog mang đến những thông tin hữu ích cho công việc, cuộc sống, đam mê của bạn, đừng ngại ủng hộ một ly cà phê để mình có thêm động lực chia sẻ thêm nhiều kinh nghiệm, kiến thức nhé.

Bạn có thể ủng hộ mình qua:

# Mời cà phê

Nếu cảm thấy blog mang đến những thông tin hữu ích cho công việc, cuộc sống, đam mê của bạn, đừng ngại ủng hộ một ly cà phê để mình có thêm động lực chia sẻ thêm nhiều kinh nghiệm, kiến thức nhé.

Bạn có thể ủng hộ mình qua:

# Ví MoMo



[Ví MoMo](#)

# Paypal

[Hỗ trợ qua Paypal](#)

Cám ơn mọi người!

---

Phiên bản #3

Được tạo 4 tháng 4 2024 14:38:51 bởi Kiên Lê

Được cập nhật 4 tháng 4 2024 15:00:55 bởi Kiên Lê